

U.S. DEPARTMENT OF ENERGY
**Office of Electricity Delivery and
Energy Reliability**



ENERGY ASSURANCE DAILY

September 16, 2005

Highlights/Major Developments

Update: Hurricane Ophelia

**OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Hurricane/ Tropical Storm Ophelia Situation Report #3
September 16, 2005 (9:30 AM EDT)
Last Report**

HIGHLIGHTS

As of 9:00AM 9/16 total outages due to Hurricane/ Tropical storm Ophelia in North Carolina are now below 9,700. Progress Energy reports 8,656 customers without power and approximately 1,000 outages are reported by the NC Electric Cooperatives.

At 8:00AM 9/16 NOAA reports that tropical storm Ophelia has begun to move northeastward. The center of the tropical storm was about 65 miles northeast of Cape Hatteras, North Carolina, moving toward the northeast near 8 miles per hour. Maximum sustained winds are near 65 miles per hour and little change in strength is forecast over the next 24 hours. Tropical storm force winds extend outward up to 105 miles mainly to the east of the center. No significant additional rainfall accumulations are expected across eastern North Carolina or southeastern Virginia.

http://www.nhc.noaa.gov/refresh/graphics_at1+shtml/084631.shtml?3day

ELECTRICITY INFORMATION

Progress Energy reports the following outages by county:

Carteret - 5,557

Craven - 109

New Hanover - 2,990

Restoration is expected to be complete in New Hanover county by midnight 9/16/05 and in Carteret and Craven counties and surrounding areas by midnight 9/17.

Update: Hurricane Katrina

OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)

U.S. DEPARTMENT OF ENERGY

Hurricane Katrina Situation Report #37

September 16, 2005 (3:00 PM EDT)

HIGHLIGHTS

Currently, 307,104 customers remain without electric power in Louisiana and Mississippi due to Hurricane Katrina. This is down by over 2.3 million from a peak of 2.7 million customers that were without power after Hurricane Katrina struck the region.

Entergy expects to restore service to most customers who can take service in the New Orleans non-flooded areas within one to two weeks.

Entergy reports that 25 large industrial customers were impacted by Katrina. All but five have been returned to service and are running at some level of plant capacity.

Entergy is also making significant progress securing the natural gas system and restoring service. Of the 150,000 gas customers in the New Orleans area, some 67,000 (45%) have been assessed, 57,500 (38%) have been secured, and 25,900 (17%) have been restored (4PM 9/15). The restored customers are primarily in the Algiers and Uptown areas along with 10% of the French Quarter and 35% of the central business district.

Working gas in storage increased to 2,758 Bcf as of Friday, September 9, which is 3.7 percent above the 5-year average inventory level for the report week, according to EIA's *Weekly Natural Gas Storage Report*. The implied net injection of 89 Bcf is 3 percent above the 5-year average of 86 Bcf and about 7 percent less than last year's injection of 96 Bcf. It is also the largest net injection since the beginning of July and marks the first time since late June that the implied net injection has exceeded the 5-year average. Despite continued natural gas production shut-ins in the Gulf of Mexico, which reduces supplies from what they otherwise would have been, the relatively large net injection occurred as futures prices hold a significant premium to the Henry Hub spot price offering a strong economic incentive to store natural gas for the winter heating season.

On September 14, the Federal Motor Carrier Safety Administration extended the driverhour waiver for motor carriers hauling gasoline, propane, diesel, jet fuel, natural gas/CNG, and ethanol in the Southern and Eastern regions of the country in response to fuel supply circumstances resulting from Hurricane Katrina and to EPA's recent extended fuel waiver. The waiver will expire on October 5, 2005.

On 9/13, EPA extended the diesel waiver for States located in PADD 1 (DC, ME, NH, VT, MA, RI, CT, NY, NJ, PA, MD, DE, WV, VA, NC, SC, GA, and FL) and PADD 3 (NM, TX, LA, MS, AL, and AR), including Tennessee to allow the use of high sulfur diesel for on-road use until October 5, 2005.

DOE staff have been at the National Response Coordination Center (NRCC) at FEMA HQ, the Interagency Incident Management Team at HQ, FEMA Region IV, and the State Emergency Operation Centers (EOC) in Louisiana for several weeks.

PETROLEUM AND GAS INFORMATION

According to MMS reports on 9/16, 10.26 percent of 819 manned platforms and 1.49 percent of 134 rigs remain evacuated in the Gulf of Mexico (GOM). Today's shut-in oil production is 840,921 barrels of oil per day. The shut-in oil production is equivalent to 56.06 percent of the normal daily oil production in the GOM, which is currently approximately 1.5 million barrels of oil per day. Shut-in gas production is 3.384 billion cubic feet per day. This shut-in gas production is equivalent to 33.84 percent of the normal daily gas production in the GOM, which is currently approximately 10 billion cubic feet per day.

Improvement in GOM Shut-in Oil and Gas 8/30/05 – 9/16/05

Date	Percent of GOM Oil Shut-in	Percent of GOM Gas Shut-in
August 30	95.20	87.99
August 31	91.45	83.46
September 1	90.43	78.66
September 2	88.53	72.48
September 3	78.98	57.80
September 4	No data reported	No data reported
September 5	69.57	54.13
September 6	58.02	41.06
September 7	57.37	40.36
September 8	60.12	40.20
September 9	59.88	38.29
September 10	59.84	38.21
September 11	No data reported	No data reported
September 12	57.38	37.84
September 13	56.45	37.20
September 14	56.25	35.18
September 15	56.14	34.11
September 16	56.06	33.84

MMS has provided the following estimates of Hurricane Katrina damage to Outer Continental Shelf Infrastructure in the Gulf of Mexico: 46 producing structures destroyed; 20 producing structures extensively damaged; 4 drilling rigs destroyed; 9 drilling rigs extensively damaged; and 6 rigs adrift (all rigs have been located, remanned, and are having power brought up on them).

MMS reports that most of the destroyed platforms were 30- year-old shelf platforms with minimal production in the West Delta, Grand Isle, and South Pass areas.

Entergy reports that it is working with the French Quarter Municipal Council, police and fire officials to coordinate gaining access to shut off and lock gas services. The gas system in this area has extensive water intrusion which will require the shut off of service and mitigation before gas service can be resumed.

The Army Corps of Engineers is providing 5 MW of temporary power to the Air Products Plant in New Orleans. This plant is the largest supplier of liquid hydrogen to the nation. Temporary power will support the load requirements during the recovery phase.

Natural Gas Transmission Pipeline Status (9/13/05 PM)

Pipeline	Primary Markets	Capacity (MMcfd)	Impacts
ANR Pipeline	Midwest	6,414	None reported
Florida Gas Transmission	Florida	2,150	10% overage limit (9/13/2005)
Gulf South	Gulf States	2,750	Allocations in categories other than Primary Firm service
Southern Natural Gas	Southeast	3,296	550 mmcf production shut in
Tennessee Gas	Northeast	6,937	700 mmcf production shut in
Texas Eastern Transmission	Northeast	5,939	Deliveries allowed only for confirmed receipts
Trunkline Gas	Midwest, East Coast	1,500	Deliveries allowed only for confirmed receipts
Transco	Northeast	8,100	None Reported
Gulfstream	Florida	1,100	Deliveries allowed only for confirmed receipts

Natural Gas Processing Plant Status (9/13/05)

Natural Gas Processing Plant	State	Capacity as of Jan 1, 2005 (MMcfd)*	2004 Average Throughput (MMcfd)**	Current Status
Dynegy - Yscloskey	LA	1,850	1,343	Seawater damage. Could take 3-6 months to repair.
Dynegy – Venice	LA	1,300	997	Seawater damage. Could take 3-6 months to repair.
Enterprise Products – Toca	LA	1,100	468	Assessment ongoing.
BP – Pascagoula	MS	1,000	768	Power restored. Waiting for pipelines to deliver gas.
ExxonMobil – Garden City	LA	630	NA	Waiting on power
Duke Energy – Mobile Bay	AL	600	172	Available for service but waiting on pipeline outlet for liquids.
Marathon – Burns Point	LA	200	60	Waiting on power
ExxonMobil – Grand Isle	LA	115	72	Waiting on power

The tables below show no change in the five shutdown refineries and company confirmation of status of two refineries with reduced runs.

Table 1. Shutdown Refineries

Refinery	Location	State	Capacity (bbl/day)	Current Status
ConocoPhillips*	Belle Chasse	LA	247,000	No power - major damage
ExxonMobil	Chalmette	LA	187,200	No power - water damage
Murphy	Meraux	LA	120,000	No power – water is starting to recede, currently making assessment of damage, leaking crude oil tank repaired
Shell Chemical	St Rose	LA	55,000	Operating at full capacity
ChevronTexaco*	Pascagoula	MS	325,000	Damage unknown – assessment being made

Table 2. Refineries with Reduced Runs

Refinery	Location	State	Capacity (bbl/day)	Current Status
Motiva (Shell)	Norco	LA	226,500	Operating at almost 100% capacity

ELECTRICITY INFORMATION**STATE OUTAGE DATA**

Utility	Customers w/o Power	% Customers w/o Power from Katrina
Louisiana*	72,104	25%
Mississippi	35,000	<3%

*Louisiana data is reported by the Louisiana Public Service Commission and their percentage outage numbers are used in calculating the percentage of total outage.

STATE REPORTS**Mississippi and Louisiana**

In Louisiana 272,104 customers remain without power, as reported by the Louisiana Public Service Commission (LAPSC) (6:00 AM 9/16/05 latest report).

Louisiana Outage Data by Utilities with Significant Outages (11:00 AM 9/15/05)

UTILITY	OUTAGES	% customers w/o power
Entergy Louisiana	62,743	13%
Entergy New Orleans	167,727	82%
Wash-St. Tammany	19,362	43%
CLECO	21,910	27%
Total for state shown includes companies with low percentage outages not shown in the Table	272,104	25%

*Louisiana data and percentages are reported by the Louisiana Public Service Commission.

As of reporting 9/16/05 Mississippi had 35,000 customers without power, which represents less than 3 percent of customers in the state, including 18,776 Mississippi Power customers and 16,224 customers of the Electric Power Associations of Mississippi (EPAOFMS).

Entergy Transmission reports 32 lines and 25 substations out of service as of 11:00AM 9/16/05. At this time, all transmission substations in the region that are accessible and did not sustain flood damage are back in service.

Entergy has reported estimates that some 12,700 poles were damaged in areas that are not inaccessible to crews. The heaviest damage to poles appears to be in the following areas: Amite-Bogalusa -- 4,400 poles; Westbank -- 2,300 poles; Metairie Kenner -- 2,100 poles; Lockport and Luling -- 1,800 poles; and Hammond -- 1,600 poles.

While the company cannot estimate the pole damage in Metro New Orleans until flooded areas can be entered and assessed, they believe that the current number of poles that need to be repaired is approximately 2,100.

Additional Information

Hurricane Katrina Evacuation and Production Shut-in Statistics Report as of Friday, September 16, 2005

Next Report will be issued on Monday, September 19, 2005 at 1:00 PM CDT

For information concerning the storm click on www.mms.gov

This survey reflects 54 companies' reports as of 11:30 a.m. Central Daily Time.

Districts	Lake Jackson	Lake Charles	Lafayette	Houma	New Orleans	Total
Platforms Evacuated	0	0	0	2	82	84
Rigs Evacuated	0	0	0	0	2	2
Oil, BOPD Shut-in	0	620	1,122	60,871	778,308	840,921
Gas, MMCF/D Shut-In	0	22.00	2.90	435.89	2,922.90	3,383.69

<http://www.mms.gov/ooc/press/2005/press0916b.htm>

These cumulative numbers reflect updated production numbers from all previous reports. The reports only represent input received by 11:30 a.m. CDT. If a company does not report by 11:30 a.m. it is not included in the special information release, but it is included in the cumulative shut-in production. This may result in an apparent increase in the cumulative report amount.

Electricity

Accident Triggers Outage for 31,000 in Tallahassee

Some 31,000 customers of Progress Energy in Tallahassee were without electricity on Thursday afternoon when a car struck a power pole. Power was restored within approximately two hours.

<http://www.tallahassee.com/mld/tallahassee/news/local/12658251.htm>

Update –Faulty Drawing Leads to Outage for 2,000,000 DWP Customers

The recent massive power outage in Los Angeles resulted from faulty communication. Although engineers determined that the bundle of wires that once severed resulted in the outage should be left intact, drawings in the work order indicated that the wires should be cut and removed. (Approximately two million people or 756,000 customers of the Los Angeles Department of Water and Power lost electricity for up to two and a half hours on September 12.) Officials are investigating in an effort to determine the source of the drawing.
<http://www.montereyherald.com/mld/montereyherald/news/politics/12660866.htm>

Damaged Coal Terminal Not A Problem for TECO's Generation Capability

Despite the damage to its TECO Bulk Terminal in Louisiana, TECO Energy does not anticipate that a problem will develop that will necessitate a curtailment of output at its coal-fired generation facilities.
http://pro.energycentral.com/professional/news/power/news_article.cfm?id=5951688

Calpine's 600 MW Metcalf Plant Dedicated

The 600 MW gas-fired Metcalf Energy Center was dedicated on September 15. The plant, located in San Jose, California, is the largest addition to the generation mix in Silicon Valley. Although the plant was formally dedicated on Thursday, it was available beginning in May to help meet peak demand.
<http://www.energycentral.com/centers/news/daily/article.cfm?aid=5953062>

Indian Point's Emergency Warning System Test Somewhat Successful, Somewhat Not

During a test of the four-county emergency siren warning for the Indian point nuclear generating station in Rockland County, New York, a number of the sirens did not function properly when a radio-controlled backup system was tested. Officials in Rockland are attempting to determine if any of the county's sirens worked properly; in Westchester County, more than 10 percent of the sirens failed to be activated by the backup system. The incident is under investigation to determine the cause of the failure.

Source: The Journal News

<http://www.thejournalnews.com/apps/pbcs.dll/article?AID=/20050915/NEWS02/509150316/1019/NEWS03>

Output at Diablo Canyon Drops to 25 Percent, Cut by Rough Seas

The forecast of rough conditions in the Pacific near the Diablo Canyon nuclear generating station led PG&E to reduce output to approximately 25 percent of capacity at both of the 1,087 MW units.
Bloomberg 11:34, September 16, 2005.

Transformer Problem Shuts Intermountain Unit 1 in Utah September 14

Reuters 15:03, September 16, 2005.

Martin Lake Repair Complete, Restart Expected September 16

Reuters 14:27, September 16, 2005.

Update – Exelon's 850 MW Dresden Unit 2 Ramps Up to 85 Percent from 34 Percent

Reuters 7:42, September 16, 2005.

Exelon's 1,112 Unit 2 at its Peach Bottom Nuclear Generating Station in Pennsylvania Drops to 70 percent of Capacity September 16

Reuters 7:39, September 16, 2005

Mirant's 337 MW Gas-fired Unit 6 at its Contra Costa Facility in California Shut September 16

Reuters 15:03, September 16, 2005

PG&E's 407 MW Unit 1 at its Helms Hydro Facility in California Shut September 16

Reuters 15:03, September 16, 2005

PG&E's 407 MW Unit 2 at its Helms Hydro Facility in California Shut September 16

Reuters 15:03, September 16, 2005

PG&E's 404 MW Unit 3 at its Helms Hydro Facility in California Shut September 16

Reuters 15:03, September 16, 2005

Update - Entergy's Fitzpatrick Nuclear Generating station Ramps up to 1 Percent

Reuters 14:07, September 16, 2005

Petroleum

IEA to Review Oil Release Plan

The International Energy Agency will reevaluate its agreement to release oil from the emergency reserves of its member nations in late September or early October. At the present time however, it will continue with the release program to help lessen the impact of hurricane Katrina on U.S. oil supplies.

<http://www.platts.com/Oil/News/6085166.xml?S=n>

Refiners May not Need All Oil Loaned from SPR

The six refining companies that asked to borrow a total of 12.6 million barrels of oil from the Strategic Petroleum Reserve may not need all of the oil. Three companies including, ExxonMobil, Placid Refining and Marathon have not yet taken delivery on all of the barrels they requested and BP Oil, which was loaned 2 million barrels has indicated they may not need the oil at all.

Reuters, 18:00 September 15, 2005

MMS Sees Gulf Oil and Gas Production Near Normal by End of October

The Director of the Minerals Management Service announced that oil and gas production in the Gulf of Mexico should be up to about 90 percent of the pre-storm level by the end of October. However, while most of the production capacity can be restored by that time, some of the production will not be able to reach the market for as long as three months until repairs to other infrastructure elements such as pipelines and refineries can be completed. MMS also announced that Katrina did no major damage to the underwater pipelines in the Gulf.

Reuters 15:14, September 16, 2005.

Reuters 10:54 September 16, 2005

Update – Valero Estimates 3 to 4 Days Before All Units at its Los Angeles Area Refinery Back on Line

Valero Energy Corp. Reported on September 15, that some of the units at its 77,000 b/d Los Angeles are refinery hit by the widespread blackout on September 12 will not be back in service for another three to four days. One problem is a lack of electricity from a third-party provider.

Bloomberg 13:41, September 15, 2005.

Update – Williams Damage Assessment

Williams Companies announced on September 16 that it has restarted some 200,000 dekatherms of its Gulf of Mexico gas production and that the results of its inspection to underwater facilities shows that no significant damage occurred. Further, the company said that both its Transco and Gulfstream pipelines are fully operational.

Reuters 14:53, September 16, 2005.

FCC Unit at ConocoPhillips' Borger to be Shut for One Week

ConocoPhillips will perform maintenance on a fluid catalytic cracking unit at its 146,000 b/d Borger refinery in Oklahoma. The 60,000 b/d unit will be out of service for one week beginning September 25. No information was available as to any impact on production.

Reuters 14:54, September 15, 2005 16, 2005

NCRA Delay's Refinery Maintenance to Help Supply Situation

The National Cooperative Refinery Association announced that it will delay scheduled maintenance on its 80,000 b/d Kansas refinery so that it can continue to provide supplies to the market in the aftermath of hurricane Katrina.

Reuters 12:41, September 16, 2005

For additional information on petroleum, see Highlights/Major Developments

Natural Gas

Discovery Gas Transmission to Offer Processing Services to Producers with Stranded Gas

The Discovery Gas Pipeline, owned by Williams Companies and Duke Energy Field Services, is offering capacity on its 800 million cubic feet per day pipeline to companies whose gas was stranded from processing by Hurricane Katrina. The company expects to process up to 200 mmcf/d from El Paso's Tennessee Gas System, with additional volumes from NiSource's Columbia Gulf system.

http://pro.energycentral.com/professional/news/gas/news_article.cfm?id=5953180

Update – Enbridge Progress Assessment

Enbridge Inc announced that its 800 million cf/d Mississippi Canyon pipeline remains shut down; and that its pipelines in the Gulf of Mexico are carrying approximately one half of their pre-storm volumes of natural gas. Reuters 17:24, September 16, 2005.

Gasline Punctured by Backhoe in Los Angeles

An explosion occurred in Los Angeles on September 14 after a Department of Water and Power contractor digging a sewer line punctured a gas line with a backhoe. The pipeline siphons methane gas from a nearby landfill. The landfill operator shut off gas to the pipe so repairs could be made. No injuries were reported.

http://pro.energycentral.com/professional/news/gas/news_article.cfm?id=5952148

For information on natural gas, see Highlights/Major Developments

Other News

Update – Law Suit to Cap CO2 Emissions Dismissed

A federal court judge dismissed the law suit filed by eight states to set limits on CO2 emissions. The judge indicated that the such limits should be developed by Congress and the President, not the courts.

http://pro.energycentral.com/professional/news/power/news_article.cfm?id=5953489

Energy Prices

	Latest (09/16/05)	Week Ago	Year Ago
CRUDE OIL West Texas Intermediate US \$/Barrel	62.91	64.21	45.63
NATURAL GAS Henry Hub \$/Million Btu	11.25	11.03	4.95

Source: Reuters

This Week in Petroleum from the Energy Information Administration (EIA)

<http://tonto.eia.doe.gov/oog/info/twip/twip.asp>

Updated on Wednesdays

Weekly Petroleum Status Report from EIA

http://www.eia.doe.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html

Updated after 1:00pm (Eastern time) on Wednesdays

Natural Gas Weekly Update from EIA

<http://tonto.eia.doe.gov/oog/info/ngw/ngupdate.asp>

Updated after 2:00 pm (Eastern time) on Thursdays

ENSEC threat awareness blog site from Energy Assurance

<http://ensec.blogspot.com>